Art Unit: ***

CLMPTO

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CLAIM 1 (ORIGINAL)

- 1. A method of enhancing expression of a desired protein at mucosal effector sites, said method comprising placing the protein to be expressed under the control of a promoter having SEQ ID NO 2, SEQ ID NO 3 or SEQ ID NO 4 or a fragment or variant or any of these which has promoter activity, and causing expression in mucosal cells.
- 2. (Amended) A construct comprising a promoter selected from the group consisting of P_{umpC}, P_{phoP} and P_{papC} or fragments or variants thereof which can act as promoters, operatively interconnected with a nucleic acid which encodes a protein, able to induce a protective immune response against an organism, in a mammal to which it is administered, wherein said construct contains no further elements of the ompC, phoP or pagC gene.
- 3. (Amended) The recombinant gut-colonising microorganism which has been transformed with a construct of claim 2.
- 4. (Amended) The recombinant gut-colonising microorganism of claim 3 wherein said protein is heterologous to said microorganism.

Art Unit: ***

CLAIM 5-6 (CANCELLED)

- 7. (Amended) The recombinant gut-colonising microorganism of claim 3 which comprises a Salmonella spp.
- 8. (Amended) The recombinant gut-colonising microarganism of claim 7 wherein the Salmonella spp. is Salmonella typhimurium or Salmonella typhi.
- 9. (Amended) The recombinant gut-colonising microorganism of claim 3 wherein the gut-colonising microorganism is attenuated.
- 10. (Amended) The construct of claim 2 wherein the heterologous protein is able to induce a protective immune response against Yersinia pestis.
- 11. (Amended) The construct of claim 10 wherein the said heterologous protein comprises an F1-antigen of Yersinia pestis or an antigenic fragment or variant thereof.

Art Unit: ***

- 12. (Amended) A vaccine comprising a recombinant gut-colonising microorganism of claim 3.
- 13. (Amended) The vaccine of claim 12 which further comprises a pharmaceutically acceptable carrier or diluent.
- 14. (Amended) The vaccine of claim 12 which is adapted for oral administration.
- 15. (Amended) A method of inducing a protective immune response against a pathogen in a mammal, said method comprising administering to said mammal a recombinant gut-colonising microorganism of claim 3.

CLAIM 16 (CANCELLED)

17. (New) The recombinant gut-colonising microorganism of claim 3 wherein the heterologous protein is able to induce a protective immune response against *Yersinia pestis*.

Application/Control Number: 10/070,882

Art Unit: ***

- 18. (New) The vaccine of claim 13 which is adapted for oral administration.
- 19. (New) The recombinant gut-colonising microorganism of claim 9 which comprises Salmonella spp.
- 20. (New) The vaccine of claim 12 wherein the promoter has the sequences of SEQ ID NO 1, SEQ ID NO 2, SEQ ID NO 3 or SEQ ID NO 4.
- 21. (New) The recombinant gut-colonising microorganism of claim 19 wherein the Salmonella app.is Salmonella typhimurium or Salmonella typhi.
- 22. (New) The recombinant gut-colonising microorganism of claim 17 wherein the said heteriologous protein comprises an F1-antigen of Yersinia pestis or an antigenic fragment or variant thereof.